

- Pass 1 Results for 78 Labs - - Pass 2 Results for 78 Labs -

Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Ammoniacal Nitrogen, MgO Distillation .	920.03	001.10	7	17.12	0.27	0.05	7	17.12	0.27	0.05
Ammoniacal Nitrogen, Other .....		001.99	12	17.29	0.31	0.09	11	17.28	0.31	0.05
Method Group 001.XX PCT			19	17.23	0.30	0.08	17	17.18	0.27	0.04
Nitrate Nitrogen, Other .....		002.99	2	0.45	0.02	0.01	2	0.45	0.02	0.01
Ammon & Nitrate N, Devarda .....	892.01	009.10	2	16.99	0.65	0.14	2	16.99	0.65	0.14
Ammon & Nitrate N, Other .....		009.99	1	17.98	0.11	0.15	1	17.98	0.11	0.15
Method Group 009.XX PCT			3	17.32	0.71	0.14	3	17.32	0.71	0.14
Total Nitrogen, Modified Comprehensive	978.02	010.11	8	17.83	0.19	0.05	8	17.83	0.19	0.05
Total Nitrogen, Salicylic .....	955.04D	010.12	3	17.63	0.12	0.13	3	17.63	0.12	0.13
Total Nitrogen, Raney .....	970.03	010.16	1	18.25	0.07	0.10	1	18.25	0.07	0.10
Total Nitrogen, Combustion .....		010.60	46	17.83	0.21	0.09	44	17.84	0.21	0.08
Total Nitrogen, Other .....		010.99	5	17.96	0.40	0.11	5	17.96	0.40	0.11
Method Group 010.XX PCT			66	17.81	0.28	0.09	63	17.81	0.28	0.08
Total Phosphate, Grav Quimociac .....	962.02	020.10	7	46.33	0.15	0.10	7	46.33	0.15	0.10
Total Phosphate, Spectrometric .....	958.01	020.20	13	46.09	0.61	0.21	13	46.09	0.61	0.21
Total Phosphate, Automated .....	978.01	020.40	7	46.10	0.44	0.15	7	46.10	0.44	0.15
Total Phosphate, ICP .....		020.50	9	45.08	1.05	0.42	9	45.08	1.05	0.42
Total Phosphate, Other .....		020.99	3	45.56	0.90	0.03	3	45.56	0.90	0.03
Method Group 020.XX PCT			40	45.89	0.83	0.21	38	45.89	0.83	0.16
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	1	0.29	0.01	0.02	1	0.29	0.01	0.02
Insoluble Phosphate, Spectrometric ....	963.03C	030.20	1	0.27	0.00	0.00	1	0.27	0.00	0.00
Insoluble Phosphate, Automated .....	978.01	030.40	2	0.21	0.10	0.01	2	0.21	0.10	0.01
Insoluble Phosphate, ICP .....		030.50	1	0.14	0.00	0.00	1	0.14	0.00	0.00
Method Group 030.XX PCT			5	0.22	0.08	0.01	4	0.21	0.08	0.00
InDir Available Phosphate, Grav Quim ..	960.02	040.10	1	46.24	0.09	0.13	1	46.24	0.09	0.13
InDir Available Phosphate, Automated ..	960.02	040.40	2	46.17	0.21	0.10	2	46.17	0.21	0.10
InDir Available Phosphate, ICP .....		040.50	1	45.80	0.19	0.27	1	45.80	0.19	0.27
InDir Available Phosphate, Other .....		040.99	1	46.05	0.02	0.03	1	46.05	0.02	0.03
Method Group 040.XX PCT			5	46.08	0.22	0.13	5	46.08	0.22	0.13
Dir Available Phosphate, Grav Quimociac	960.03E	041.10	14	46.09	0.39	0.10	13	46.11	0.39	0.08
Dir Available Phosphate, Spectrometric	960.03D	041.20	2	46.16	1.75	0.82	2	46.16	1.75	0.82
Dir Available Phosphate, Automated ....	978.01	041.40	4	46.45	0.39	0.40	4	46.45	0.39	0.40
Dir Available Phosphate, ICP .....		041.50	8	46.19	0.63	0.21	8	46.19	0.63	0.21
Dir Available Phosphate, EDTA Extract .	993.01	041.60	7	45.99	0.26	0.14	6	46.05	0.21	0.08
Dir Available Phosphate, Other .....		041.99	1	46.20	0.21	0.29	1	46.20	0.21	0.29
Method Group 041.XX PCT			36	46.14	0.56	0.21	34	46.14	0.45	0.18
Water Soluble Phosphate, Spectrometric	970.01	048.20	3	42.73	1.33	0.18	3	42.73	1.33	0.18
Water Soluble Phosphate, ICP .....		048.50	1	38.60	0.14	0.20	1	38.60	0.14	0.20
Method Group 048.XX PCT			4	41.69	2.22	0.18	4	41.69	2.22	0.18

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Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Soluble Potash, STPB Oxalate	958.02	050.00	9	59.64	1.10	0.10	9	59.64	1.10	0.10
Soluble Potash, STPB Citrate	969.04	050.10	2	60.01	0.33	0.13	2	60.01	0.33	0.13
Soluble Potash, AA (Oxalate)		050.30	8	60.77	1.93	0.45	7	60.64	2.01	0.28
Soluble Potash, AA (Citrate)		050.31	1	59.93	0.00	0.00	1	59.93	0.00	0.00
Soluble Potash, ICP (Oxalate)		050.50	8	59.69	1.40	0.54	8	59.69	1.40	0.54
Soluble Potash, ICP (Citrate)		050.51	8	59.82	1.32	0.24	7	59.86	1.40	0.15
Soluble Potash, Flame (Oxalate)	983.02(a)	050.60	4	61.09	1.49	0.28	3	61.66	1.20	0.05
Soluble Potash, Flame (Citrate)	983.02(b)	050.61	6	60.38	0.56	0.49	6	60.38	0.56	0.49
Soluble Potash, Other		050.99	19	60.11	1.30	0.54	17	60.21	1.26	0.36
Method Group 050.XX PCT			65	60.12	1.36	0.39	58	60.03	1.17	0.26
Free Water, Vacuum Oven	965.08B	060.00	4	2.25	0.23	0.07	4	2.25	0.23	0.07
Free Water, Other		060.99	1	0.05	0.06	0.08	1	0.05	0.06	0.08
Method Group 060.XX PCT			5	1.81	0.95	0.08	5	1.81	0.95	0.08
Acid Soluble Calcium, AA	945.04	101.00	1	0.14	0.00	0.00	1	0.14	0.00	0.00
Acid Soluble Calcium, ICP		101.30	9	0.18	0.04	0.01	9	0.18	0.04	0.01
Method Group 101.XX PCT			10	0.18	0.04	0.01	9	0.19	0.03	0.01
Acid Soluble Magnesium, AA	984.01	121.00	1	0.80	0.00	0.00	1	0.80	0.00	0.00
Acid Soluble Magnesium, ICP		121.30	11	0.61	0.50	0.01	10	0.59	0.52	0.01
Acid Soluble Magnesium, Other		121.99	1	1.00	0.01	0.01	1	1.00	0.01	0.01
Method Group 121.XX PCT			13	0.65	0.47	0.01	12	0.64	0.49	0.01
Sulfur, Gravimetric	980.02a	144.01	7	1.00	0.05	0.02	7	1.00	0.05	0.02
Sulfur, Other		144.99	15	0.94	0.07	0.01	14	0.94	0.07	0.01
Method Group 144.XX PCT			24	0.96	0.11	0.02	22	0.96	0.07	0.01
Arsenic, Atomic Absorption		151.00	1	0.08	0.00	0.00	1	0.08	0.00	0.00
Arsenic, ICP		151.30	7	6.49	7.79	0.47	6	4.91	7.23	0.18
Arsenic, Other		151.99	1	0.52	0.02	0.03	1	0.52	0.02	0.03
Method Group 151.XX PPM			9	5.12	7.31	0.37	8	3.76	6.53	0.14
Acid Soluble Boron, Other		165.99	4	0.027	0.018	0.000	3	0.020	0.015	0.000
Cadmium, Atomic Absorption		181.00	1	0.10	0.00	0.00	1	0.10	0.00	0.00
Cadmium, ICP		181.30	9	2.20	1.96	0.08	8	1.91	1.90	0.04
Method Group 181.XX PPM			10	1.99	1.97	0.07	9	1.71	1.87	0.04
Water Soluble Chlorine, Titrimetric	928.02	190.00	9	47.23	0.94	0.31	8	47.36	0.90	0.22
Water Soluble Chlorine, Other		190.99	7	47.20	1.43	0.18	7	47.20	1.43	0.18
Method Group 190.XX PCT			16	47.22	1.16	0.26	15	47.28	1.16	0.20
Chromium, ICP		191.30	9	28.47	43.46	1.00	8	26.82	45.98	0.55
Chromium, Other		191.99	1	2.00	0.06	0.08	1	2.00	0.06	0.08
Method Group 191.XX PPM			10	25.82	41.91	0.90	8	13.38	33.04	0.18
Acid Soluble Cobalt, ICP	965.11	202.30	8	2.98	2.25	0.20	8	2.98	2.25	0.20
Acid Soluble Cobalt, Other		202.99	3	2.75	3.99	0.01	3	2.75	3.99	0.01

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Method	AOAC Ref.	Method Code	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Method Group 202.XX PPM			11	2.92	2.73	0.15	9	2.47	2.83	0.06
Acid Soluble Copper, ICP .....		221.30	10	0.0007	0.0008	0.0002	8	0.0007	0.0008	0.0000
Acid Soluble Copper, Other .....		221.99	1	0.0001	0.0000	0.0000	1	0.0001	0.0000	0.0000
Method Group 221.XX PCT			11	0.0006	0.0007	0.0002	9	0.0006	0.0008	0.0000
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	1	1.46	0.04	0.06	1	1.46	0.04	0.06
Acid Soluble Iron, ICP .....		241.30	8	0.72	0.71	0.02	8	0.72	0.71	0.02
Acid Soluble Iron, Other .....		241.99	1	1.36	0.01	0.01	1	1.36	0.01	0.01
Method Group 241.XX PCT			10	0.86	0.69	0.03	10	0.86	0.69	0.03
Lead, ICP .....		251.30	10	2.25	2.62	0.24	9	1.88	2.49	0.14
Method Group 251.XX PPM			10	2.25	2.62	0.24	9	1.88	2.49	0.14
Acid Soluble Manganese, AA .....	972.02a	261.00	1	0.015	0.001	0.001	1	0.015	0.001	0.001
Acid Soluble Manganese, ICP .....	972.02a	261.30	10	0.014	0.013	0.001	9	0.015	0.013	0.000
Acid Soluble Manganese, Other .....		261.99	1	0.026	0.001	0.001	1	0.026	0.001	0.001
Method Group 261.XX PCT			12	0.015	0.012	0.001	11	0.016	0.012	0.000
Mercury, ICP .....		281.30	1	2.89	0.02	0.03	1	2.89	0.02	0.03
Molybdenum, ICP .....		289.30	10	5.77	4.99	1.24	9	5.07	4.50	0.35
Molybdenum, Other .....		289.99	1	0.03	0.00	0.00	1	0.03	0.00	0.00
Method Group 289.XX PPM			11	5.25	5.04	1.13	10	4.57	4.53	0.31
Nickel, ICP .....		291.30	9	6.69	7.60	0.18	8	5.50	7.21	0.11
Nickel, Other .....		291.99	1	0.60	0.03	0.04	1	0.60	0.03	0.04
Method Group 291.XX PPM			10	6.08	7.43	0.17	8	4.78	7.38	0.04
Selenium, ICP .....		301.30	3	0.35	0.35	0.21	3	0.35	0.35	0.21
Selenium, Other .....		301.99	1	1.82	0.09	0.13	1	1.82	0.09	0.13
Method Group 301.XX PPM			4	0.72	0.74	0.19	4	0.72	0.74	0.19
Sodium, Other .....		311.99	6	0.85	0.50	0.02	5	0.78	0.53	0.01
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	2	0.004	0.001	0.000	2	0.004	0.001	0.000
Acid Soluble Zinc, ICP .....		321.30	11	0.003	0.003	0.000	9	0.003	0.003	0.000
Acid Soluble Zinc, Other .....		321.99	2	0.006	0.005	0.000	2	0.006	0.005	0.000
Method Group 321.XX PCT			15	0.003	0.003	0.000	13	0.003	0.003	0.000
Water Soluble Zinc, ICP .....		325.30	1	0.000	0.000	0.000	1	0.000	0.000	0.000
Water Soluble Zinc, Other .....		325.99	1	0.000	0.000	0.000	1	0.000	0.000	0.000
Method Group 325.XX PCT			2	0.000	0.000	0.000	2	0.000	0.000	0.000

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 001.10 PCT			Meth: 001.XX PCT			Meth: 009.XX PCT			Meth: 010.60 PCT			Meth: 010.60 PCT		
<u>Ammoniacal Nitrogen</u>			<u>Ammoniacal Nitrogen</u>			<u>Ammon &amp; Nitrate N</u>			<u>Total Nitrogen</u>			<u>Total Nitrogen</u>		
<u>MgO Distillation</u>									<u>Combustion</u>			<u>Combustion</u>		
456	17.53	1.50	419	17.30	.42	105	17.98	.92	296	18.25	1.94	024	17.67	-.86
444	17.48	1.30	397	17.25	.30	090	17.55	.31	055	18.23	1.82	042	17.74 R	-.87
291	17.14	.07	300	17.26	.28	Avg	17.32		255	18.18	1.67	361	17.63	-.99
Avg	17.12		371	17.21	.10	117	16.44	-1.24	102	17.85 R	1.10	027	17.62	-1.01
232	16.99	-.47	Avg	17.18		Meth: 010.11 PCT			377	18.05	1.01	330	17.65	-1.12
309	17.00	-.47	291	17.14	-.16	Total Nitrogen			390	18.02	.87	402	17.55	-1.36
090	16.93	-.72	409	17.04	-.53	<u>Modified Comprehensi</u>			354	18.02	.86	426	17.49	-1.75
351	16.78	-1.26	309	17.00	-.70	090 18.03 1.06			291	18.01	.82	444	17.34	-2.33
230	12.00 s	-18.70	232	16.99	-.71	460 18.02 1.03			275	17.96	.63	389	17.28	-2.63
Meth: 001.99 PCT			027	16.95	-.86	455 17.98 .79			049	17.90	.56	325	17.10 s	-3.48
<u>Ammoniacal Nitrogen</u>			090	16.93	-.95	309 17.94 .60			007	17.90	.56	406	17.06 s	-3.64
<u>Other</u>			351	16.78	-1.50	Avg 17.83			405	17.95	.54	324	17.05 s	-3.69
420	17.78	1.67	275	16.69 X	-1.81	211 17.76 -.38			131	17.94	.49	Meth: 010.99 PCT		
137	17.62	1.11	368	15.91 s	-4.69	105 17.78 -.38			232	17.91	.42	<u>Total Nitrogen</u>		
234	17.43 R	1.01	230	12.00 s	-18.91	456 17.60 -1.29			035	17.86	.32	<u>Other</u>		
096	17.53	.82	Meth: 002.99 PCT			114 17.55 -1.54			041	17.86	.30	422 18.44 1.20		
105	17.44	.53	<u>Nitrate Nitrogen</u>			260 16.75 s -5.85			177	17.89	.26	117 18.13 .45		
419	17.30	.07	<u>Other</u>			Meth: 010.12 PCT			136	17.87	.25	420 18.00 .22		
Avg	17.28		232	0.47	.88	Total Nitrogen			096	17.87	.18	Avg 17.96		
300	17.26	-.07	Avg	0.45		<u>Salicylic</u>			086	17.86	.18	105 17.95 -.20		
397	17.25	-.19	027	0.43	-.85	185 17.70 1.33			360	17.85	.16	371 17.31 -1.66		
371	17.21	-.23	Meth: 009.10 PCT			351 17.65 .35			292	17.86	.09	Meth: 010.XX PCT		
409	17.04	-.78	<u>Ammon &amp; Nitrate N</u>			Avg 17.63			409	17.85	.08	<u>Total Nitrogen</u>		
027	16.95	-1.07	<u>Devarda</u>			254 17.54 -.79			040	17.84	.05	230 19.20 s 4.90		
275	16.69 X	-1.92	090	17.55	.85	Meth: 010.16 PCT			Avg	17.84		262 19.15 s 4.73		
368	15.91 s	-4.49	Avg	16.99		Total Nitrogen			157	17.80	-.17	422 18.44 2.23		
Meth: 001.XX PCT			117	16.44	-.88	<u>Raney</u>			368	17.81	-.17	393 18.32 1.79		
<u>Ammoniacal Nitrogen</u>			Meth: 009.99 PCT			419 18.25 .71			233	17.80	-.17	419 18.25 1.56		
420	17.78 R	2.21	<u>Ammon &amp; Nitrate N</u>			Meth: 010.60 PCT			095	17.80	-.22	296 18.25 1.56		
137	17.62	1.59	<u>Other</u>			Total Nitrogen			231	17.81	-.26	055 18.23 1.47		
234	17.43 R	1.33	105	17.98	-.71	<u>Combustion</u>			029	17.82	-.28	255 18.18 1.35		
096	17.53	1.26				230 19.20 s 6.39			037	17.74	-.46	117 18.13 1.16		
456	17.53	1.26				262 19.15 s 6.16			073	17.72	-.57	377 18.05 .85		
444	17.48	1.06				393 18.32 2.25			234	17.71	-.67	102 17.85 R .84		
105	17.44	.93							450	17.70	-.79	090 18.03 .77		

\* X=Excluded from lab performance    S/s=Screened Outlier    R=Duplicate Range too large    A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 010.XX PCT			Meth: 010.XX PCT			Meth: 020.20 PCT			Meth: 020.50 PCT			Meth: 020.XX PCT		
<u>Total Nitrogen</u>			<u>Total Nitrogen</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>			<u>Total Phosphate</u>		
390	18.02	.75	450	17.70	-.52	<u>Spectrometric</u>			<u>ICP</u>			460	46.06	.21
460	18.02	.75	024	17.67	-.56	419	46.70	1.04	330	44.10	-.98	255	45.93	.17
354	18.02	.74	351	17.65	-.57	406	46.66	.92	389	43.80	-1.22	402	45.92	.11
420	18.00	.73	042	17.74 R	-.61	420	46.50	.66	393	43.78	-1.24	361	45.90	.01
291	18.01	.71	185	17.70	-.62	450	46.36	.54	432	43.03 S	-2.49	Avg	45.89	
455	17.98	.59	361	17.63	-.65	292	46.35	.42	Meth: 020.99 PCT			035	45.89	-.07
275	17.96	.56	027	17.62	-.66	405	46.32	.36	<u>Total Phosphate</u>			456	45.83	-.12
105	17.95	.55	456	17.60	-.77	231	46.30	.34	<u>Other</u>			309	45.73	-.20
405	17.95	.50	330	17.65 R	-.77	Avg	46.09		422	46.69	1.26	296	45.69	-.46
049	17.90	.48	402	17.55	-.93	460	46.06	-.08	Avg	45.56		042	45.30	-.75
007	17.90	.48	114	17.55	-.93	309	45.73	-.60	137	45.22	-.38	137	45.22	-.81
309	17.94	.46	254	17.54	-.95	296	45.69	-.84	455	44.78	-.88	390	45.35 R	-.85
131	17.94	.46	426	17.49	-1.23	232	44.97	-1.86	Meth: 020.XX PCT			232	44.97	-1.14
232	17.91	.40	444	17.34	-1.65	230	44.90	-1.95	<u>Total Phosphate</u>			230	44.90	-1.20
177	17.89	.29	371	17.31	-1.78	234	43.16 s	-4.90	114	46.93	1.25	455	44.78	-1.35
035	17.86	.28	389	17.28	-1.88	Meth: 020.40 PCT			426	46.44 R	1.06	368	44.54	-1.63
041	17.86	.28	325	17.10	-2.52	<u>Total Phosphate</u>			419	46.70	1.01	330	44.10	-2.19
043	17.88	.26	406	17.06	-2.64	<u>Automated</u>			324	46.70	1.01	389	43.80	-2.52
136	17.87	.25	324	17.05	-2.68	095	46.52	.93	422	46.69	.97	393	43.78	-2.55
096	17.87	.22	260	16.75 s	-3.75	096	46.46	.83	406	46.66	.93	234	43.16 s	-3.39
086	17.86	.21	Meth: 020.10 PCT			105	46.45	.80	090	46.53	.77	432	43.03 s	-3.97
029	17.82	.20	<u>Total Phosphate</u>			409	46.29	.41	095	46.52	.75	Meth: 030.10 PCT		
360	17.85	.18	<u>Grav Quimociac</u>			Avg	46.10		420	46.50	.73	<u>Insoluble Phosphate</u>		
292	17.86	.16	114	46.93 s	3.92	035	45.89	-.50	096	46.46	.70	<u>Grav Quimociac</u>		
409	17.85	.14	090	46.53	1.38	456	45.83	-.65	043	46.46	.68	090	0.29	-.71
040	17.84	.12	043	46.46	.85	042	45.30	-1.86	105	46.45	.68	Meth: 030.20 PCT		
009	17.81	.04	105	46.35	.61	Meth: 020.50 PCT			450	46.36	.61	<u>Insoluble Phosphate</u>		
Avg	17.81		041	46.38	.33	<u>Total Phosphate</u>			041	46.38	.59	<u>Spectrometric</u>		
157	17.80	-.03	Avg	46.33		<u>ICP</u>			105	46.35	.57	405	0.27	.00
233	17.80	-.05	300	46.27	-.42	426	46.44	1.45	292	46.35	.56	Meth: 030.40 PCT		
368	17.81	-.08	444	46.23	-.71	255	45.93	.82	405	46.32	.51	<u>Insoluble Phosphate</u>		
095	17.80	-.11	262	46.10	-1.65	402	45.92	.79	231	46.30	.49	<u>Automated</u>		
231	17.81	-.16	Meth: 020.20 PCT			361	45.90	.77	409	46.29	.48	409	0.29	.87
211	17.76	-.17	<u>Total Phosphate</u>			390	45.35	.50	300	46.27	.46	Avg	0.21	
105	17.78	-.20	<u>Spectrometric</u>			Avg	45.08		444	46.23	.41	096	0.13	-.87
037	17.74	-.25	324	46.70	1.04	368	44.54	-.52	262	46.10	.28			

\* X=Excluded from lab performance    S/s=Screened Outlier    R=Duplicate Range too large    A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 030.50 PCT Insoluble Phosphate			Meth: 040.XX PCT InDir Available Phos			Meth: 041.40 PCT Dir Available Phosph			Meth: 041.XX PCT Dir Available Phosph			Meth: 041.XX PCT Dir Available Phosph		
<u>ICP</u>			<u>Avg</u>			<u>Automated</u>			<u>354</u>			<u>368</u>		
255	0.14	.00	405	46.08		095	48.64 s	5.64	030	47.61 A	3.39	007	44.65 s	-3.88
			409	46.05	-.18				009	47.00	1.93	393	44.40 s	-4.10
			255	46.00	-.40	Meth: 041.50 PCT Dir Available Phosph			027	46.88	1.76	296	42.78 s	-7.55
Meth: 030.XX PCT Insoluble Phosphate			Meth: 041.10 PCT Dir Available Phosph			ICP			325			296		
090	0.29 R	1.06	Grav Quimociac			360			46.70			41.78 s		
409	0.29	1.05	009	46.54	1.09	354	46.59	1.08	360			Meth: 048.20 PCT		
405	0.27	.81	136	46.47	.92	009	46.70	.86	029			Water Soluble Phosph		
Avg	0.21		086	46.46	.89	325	46.59	.69	009			Spectrometric		
255	0.14	-.86	049	46.41	.78	136	46.31	.40	136			420		
096	0.13	-1.00	177	46.35	.61	086	46.46	.71	049			Avg		
Meth: 040.10 PCT InDir Available Phos			131			055			049			42.73		
<u>Grav Quim</u>			211			023			131			096		
090	46.24	.71	Avg	46.11		368	46.31	.63	131			405		
Meth: 040.40 PCT InDir Available Phos			055			007			105			Meth: 048.50 PCT		
<u>Automated</u>			105			393			105			Water Soluble Phosph		
096	46.34	.92	260	45.90	-.54	007	44.40 S	-2.80	211			ICP		
Avg	46.17		102	45.90 R	-.75	007	42.78 S	-5.39	043			393		
409	46.00	-.81	254	45.76	-.89	Meth: 041.60 PCT Dir Available Phosph			043			Meth: 048.XX PCT		
Meth: 040.50 PCT InDir Available Phos			185			EDTA Extract			177			Water Soluble Phosph		
<u>ICP</u>			Meth: 041.20 PCT Dir Available Phosph			043			377			420		
255	45.80	.71	Spectrometric			46.26			46.15			096		
			030	47.61	.85	1.01			46.14			Avg		
			Avg	46.16		.98			46.14			405		
			419	44.70	-.88	.77			46.14			405		
Meth: 040.99 PCT InDir Available Phos			Meth: 041.40 PCT Dir Available Phosph			043			397			393		
<u>Other</u>			Automated			46.21			095			Meth: 050.00 PCT		
405	46.05	.71	027			46.05			055			Soluble Potash		
Meth: 040.XX PCT InDir Available Phos			029			46.00			351			STPB Oxalate		
<u>ICP</u>			029			-.22			105			009		
096	46.34	1.26	Avg			-1.03			260			211		
090	46.24	.77	46.45			-1.35			102			247		
			131			-2.21			073			231		
			46.36			-20.27			296			231		
Meth: 041.99 PCT Dir Available Phosph			027			Meth: 041.99 PCT Dir Available Phosph			254			397		
<u>Other</u>			029			Other			185			Avg		
105			Avg			46.20			291			049		
.71			46.45			.71			361			114		
			-.24						419			055		
									-3.42			59.10		

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 050.00 PCT			Meth: 050.50 PCT			Meth: 050.61 PCT			Meth: 050.XX PCT			Meth: 050.XX PCT		
Soluble Potash			Soluble Potash			Soluble Potash			Soluble Potash			Soluble Potash		
<u>STPB Oxalate</u>			<u>ICP (Oxalate)</u>			<u>Flame (Citrate)</u>								
102	57.35	-2.08	Avg	59.69		035	60.06	-.67	451	62.64	2.22	137	59.76	-.23
230	52.50 s	-6.48	023	59.24	-.32	029	59.96	-.77	389	62.45	2.06	397	59.75 X	-.24
			055	58.24	-1.04	095	3.91 s	-101.11	157	62.00 R	1.78	300	59.73	-.26
			292	57.46	-1.59				406	62.04	1.71	360	59.98	-.26
Meth: 050.10 PCT			292 57.46 -1.59			Meth: 050.99 PCT			157 61.70 R 1.58			255 60.01 -.40		
Soluble Potash			324 50.55 s -6.51			Soluble Potash			402 61.86 1.56			354 59.96 -.41		
<u>STPB Citrate</u>						<u>Other</u>			009 61.63 1.36			049 59.55 -.43		
444	60.29	.88	Meth: 050.51 PCT			027 62.81 2.07			024 61.00 R 1.04			275 59.97 X -.49		
Avg	60.01		Soluble Potash			451 62.64 1.94			185 61.20 1.00			007 59.55 -.56		
300	59.73	-.85	<u>ICP (Citrate)</u>			402 61.86 1.32			086 60.18 R .95			368 59.36 -.63		
			389	62.45	1.85	Avg 60.21			136 61.05 .88			023 59.24 -.67		
			009	60.83	.70	405 60.17 -.03			456 60.89 .76			443 59.38 -.69		
Meth: 050.30 PCT			432 60.05 .19			131 60.20 -.08			009 60.83 .69			114 59.23 -.69		
Soluble Potash			Avg 59.86			090 60.11 X -.08			420 60.46 .54			393 59.21 -.70		
<u>AA (Oxalate)</u>			361 59.78 -.06			177 60.13 -.13			043 60.47 .40			055 59.10 -.80		
234	64.62	1.98	007	59.55 R	-.38	247 60.01 -.16			426 60.35 .35			455 58.48 -1.33		
157	61.70 R	.66	393	59.21	-.47	450 60.09 -.16			444 60.29 .23			073 58.51 -1.35		
185	61.20	.28	291	58.45	-1.01	422 59.99 -.17			211 60.27 .20			291 58.45 -1.35		
136	61.05	.22	377	58.26	-1.15	360 59.98 -.30			131 60.27 .20			351 58.41 -1.39		
Avg	60.64					137 59.76 -.35			041 60.10 .18			377 58.26 -1.51		
043	60.47	-.11	Meth: 050.60 PCT			255 60.01 -.41			131 60.20 .17			055 58.24 -1.53		
040	60.20	-.22	Soluble Potash			275 59.97 X -.49			035 60.06 .16			325 58.35 R -1.65		
073	58.51	-1.08	<u>Flame (Oxalate)</u>			368 59.36 -.71			432 60.05 .16			390 57.95 R -1.88		
351	58.41	-1.11	309	62.77	.93	086 60.18 R -.88			177 60.13 .15			292 57.46 -2.19		
262	48.24 s	-6.19	406	62.04	.32	455 58.48 -1.38			450 60.09 .15			102 57.35 -2.28		
			Avg	61.66		325 58.35 R -1.66			040 60.20 .14			232 54.71 s -4.54		
Meth: 050.31 PCT			460 60.17 -1.24			390 57.95 -1.89			460 60.17 .12			042 53.45 s -6.25		
Soluble Potash			443 59.38 R -1.94			232 54.71 S -4.38			405 60.17 .11			230 52.50 s -6.42		
<u>AA (Citrate)</u>						042 53.45 s -5.97			090 60.11 X .07			330 52.16 s -6.71		
254	59.93	.00	Meth: 050.61 PCT			330 52.16 s -6.41			Avg 60.03			324 50.55 s -8.08		
			Soluble Potash						247 60.02 -.01			262 48.24 s -10.09		
			<u>Flame (Citrate)</u>						247 60.01 -.02			095 3.91 s -47.82		
			030	69.02 s	15.48	Meth: 050.XX PCT			422 59.99 -.04					
			024	61.00	1.75	Soluble Potash			254 59.93 -.09			Meth: 060.00 PCT		
			456	60.89	1.00	030 69.02 s 7.66			029 59.96 -.10			Free Water		
			Avg	60.38		234 64.62 A 3.91			419 59.85 -.16			<u>Vacuum Oven</u>		
			131	60.27	-.21	027 62.81 2.36			231 59.85 -.18			456 2.45 .95		
			041	60.10	-.61	309 62.77 2.33			361 59.78 -.22			405 2.39 .61		

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 060.00 PCT			Meth: 101.XX PCT			Meth: 121.XX PCT			Meth: 144.99 PCT			Meth: 144.XX PCT		
Free Water			Acid Soluble Calcium			Acid Soluble Magnesi			Sulfur			Sulfur		
<u>Vacuum Oven</u>			095 3.83 s 110.75			095 1.61 1.96			<u>Other</u>			Avg 0.96		
096	2.26	.07	390	0.24	1.51	422	1.00	.71	137	1.04	1.47	296	0.96	-.01
Avg	2.25		131	0.23	1.16	389	0.94	.59	027	1.01	1.03	390	0.94	-.51
007	1.91	-1.49	009	0.22	.86	354	0.86	.44	330	1.00	.88	368	0.91	-.69
			232	0.19	.18	009	0.82	.35	409	1.00	.81	444	0.91	-.73
Meth: 060.99 PCT			Avg	0.19		105	0.80	.32	255	0.99	.77	389	0.90	-.88
Free Water			086	0.19	-.09	390	0.80	.32	419	0.99	.75	086	0.90	-.90
<u>Other</u>			035	0.18	-.33	131	0.79	.29	422	0.99	.75	450	0.89	-1.02
443	0.05	.71	102	0.17	-.39	393	0.75 R	.22	Avg	0.94		009	0.86	-1.51
			393	0.15	-1.28	Avg	0.64		368	0.91	-.40	035	0.85	-1.61
Meth: 060.XX PCT			105	0.14	-1.48	102	0.04	-1.24	390	0.94 R	-.41	393	0.84	-1.84
<u>Free Water</u>			354	0.12 R	-2.23	086	0.03	-1.25	389	0.90	-.59	354	0.65 R	-4.55
456	2.45	.68	Meth: 121.00 PCT			232	0.03	-1.25	086	0.90	-.61	232	0.13 s	-12.13
405	2.39	.61	Acid Soluble Magnesi			035	0.03	-1.25	450	0.89	-.74	Meth: 151.00 PPM		
096	2.26	.47	<u>AA</u>			Meth: 144.01 PCT			009	0.86	-1.23	Arsenic		
007	1.91	.11	105	0.80	-.71	Sulfur			035	0.85	-1.33	<u>Atomic Absorption</u>		
Avg	1.81					<u>Gravimetric</u>			393	0.84	-1.56	136	0.08	.00
443	0.05	-1.85	Meth: 121.30 PCT			230	1.13 s	5.26	354	0.65 s	-4.31			
			Acid Soluble Magnesi			095	1.07	1.13	232	0.13 s	-11.97	Meth: 151.30 PPM		
Meth: 101.00 PCT			<u>ICP</u>			043	1.06	1.05	Meth: 144.XX PCT			Arsenic		
Acid Soluble Calcium			095	1.61	1.94	073	1.02	.47	<u>Sulfur</u>			<u>ICP</u>		
<u>AA</u>			389	0.94	.65	105	1.01	.28	368	3.32 s	34.32	390	19.50	2.02
105	0.14	.71	354	0.86	.51	102	1.01	.17	360	3.08 s	30.86	009	16.00 R	1.54
Meth: 101.30 PCT			009	0.82	.42	Avg	1.00		230	1.13 s	4.41	296	6.80	.26
Acid Soluble Calcium			390	0.80	.39	296	0.96	-.83	157	1.22 R	3.82	Avg	4.91	
<u>ICP</u>			131	0.79	.37	444	0.91	-1.76	095	1.07	1.52	444	2.15	-.38
095	3.83 s	96.51	393	0.75 R	.30	Meth: 144.70 PCT			043	1.06	1.45	368	1.00	-.54
390	0.24	1.38	Avg	0.59		Sulfur			137	1.04	1.16	450	0.00	-.68
131	0.23	1.08	102	0.04	-1.07	<u>Spectrometric</u>			073	1.02	.91	393	0.00 X	-.68
009	0.22	.82	086	0.03	-1.07	368	3.32 S	.00	102	1.01	.74	Meth: 151.99 PPM		
232	0.19	.17	232	0.03	-1.07	Meth: 144.99 PCT			027	1.01	.72	Arsenic		
086	0.19	.07	035	0.03	-1.07	Sulfur			105	1.01	.68	<u>Other</u>		
Avg	0.18		Meth: 121.99 PCT			Other			330	1.00	.57	231	0.52	.71
035	0.18	-.22	Acid Soluble Magnesi			360	3.08 s	31.52	409	1.00	.51			
102	0.17	-.28	<u>Other</u>			157	1.22 s	4.16	255	0.99	.47			
393	0.15	-1.05	422	1.00	.71				419	0.99	.45			
354	0.12	-1.87							422	0.99	.45			

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Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
<u>Meth: 151.XX PPM Arsenic</u>			<u>Meth: 181.XX PPM Cadmium</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 191.99 PPM Chromium Other</u>			<u>Meth: 202.99 PPM Acid Soluble Cobalt Other</u>		
390	19.50	2.41	035	4.47 R	1.47	422	0.60 s	-32.68	231	2.00	.71	422	7.90	1.29
009	16.00 R	1.88	419	4.05	1.25	<u>Meth: 190.XX PCT Water Soluble Chloride</u>			<u>Meth: 191.XX PPM Chromium</u>			<u>Meth: 202.XX PPM Acid Soluble Cobalt</u>		
296	6.80	.47	296	3.75	1.09	397	49.35	1.79	009	109.50 R	2.91	Avg	2.75	
Avg	3.76		009	3.67	1.04	157	48.90	1.42	419	98.00	2.56	231	0.29	-.62
444	2.15	-.25	390	3.50	.95	419	48.85	1.35	035	41.70 R	.86	393	0.06	-.67
368	1.00	-.42	Avg	1.71		055	47.97	.59	Avg	13.38		<u>Meth: 202.XX PPM Acid Soluble Cobalt</u>		
231	0.52	-.50	450	0.20	-.81	030	47.64	.38	450	2.00	-.34	136	17.50 s	5.31
136	0.08	-.56	393	0.11	-.86	291	47.50	.19	231	2.00	-.34	422	7.90	1.92
450	0.00	-.58	136	0.10	-.86	105	47.36	.08	086	1.67	-.35	296	5.15 R	.95
393	0.00 X	-.58	102	0.02	-.90	Avg	47.28		230	1.21	-.37	009	5.07	.92
<u>Meth: 165.99 PCT Acid Soluble Boron Other</u>			<u>Meth: 190.00 PCT Water Soluble Chloride Titrimetric</u>			<u>Meth: 191.30 PPM Chromium ICP</u>			<u>Meth: 202.00 PPM Acid Soluble Cobalt AA</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
009	0.046 R	1.70	157	48.90	1.74	102	47.24	-.04	368	1.10	-.37	035	4.66 R	.78
354	0.030	.65	055	47.97	.68	137	47.12	-.14	102	1.06	-.37	390	4.28	.64
422	0.030	.65	030	47.64	.43	300	47.09	-.20	393	0.00 X	-.40	419	4.05	.56
Avg	0.020		043	46.15	-.99	460	46.95	-.29	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			Avg	2.47	
232	0.000	-1.29	029	46.10	-1.03	043	46.15	-.99	296	5.15	.97	102	0.37	-.74
<u>Meth: 181.00 PPM Cadmium Atomic Absorption</u>			<u>Meth: 181.30 PPM Cadmium ICP</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.00 PPM Acid Soluble Cobalt AA</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>		
136	0.10	.00	105	47.36	-.07	444	46.22 R	-1.03	136	17.50 S	.00	231	0.29	-.77
<u>Meth: 181.30 PPM Cadmium ICP</u>			<u>Meth: 190.00 PCT Water Soluble Chloride Titrimetric</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.00 PPM Acid Soluble Cobalt AA</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>		
035	4.47 R	1.35	030	47.64	.43	102	47.24	-.13	368	1.10	-.37	368	0.25	-.79
419	4.05	1.13	291	47.50	.16	043	46.15	-1.35	389	33.35 s	-12.04	393	0.06	-.85
296	3.75	.97	Avg	47.36		444	46.22 R	-1.39	422	0.60 s	-40.33	450	0.00	-.87
009	3.67	.93	105	47.36	-.07	029	46.10	-1.40	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
390	3.50	.84	102	47.24	-.13	<u>Meth: 191.30 PPM Chromium ICP</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
Avg	1.91		043	46.15	-1.35	009	109.50	1.80	296	5.15	.97	450	1.0000 s	1237.02
450	0.20	-.90	444	46.22 R	-1.39	419	98.00	1.55	009	5.07	.93	354	0.0020	1.62
393	0.11	-.95	029	46.10	-1.40	035	41.70 R	.33	035	4.66	.76	095	0.0020	1.62
102	0.02	-1.00	<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
368	0.01	-1.00	397	49.35	1.51	Avg	26.82		390	4.28	.58	Avg	0.0007	
<u>Meth: 181.30 PPM Cadmium ICP</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
035	4.47 R	1.35	419	48.85	1.16	450	2.00	-.54	419	4.05	.48	419	0.0006	-.15
419	4.05	1.13	Avg	47.20		086	1.67	-.55	Avg	2.98		433	0.0005	-.21
296	3.75	.97	137	47.12	-.06	230	1.21	-.56	102	0.37	-1.16	393	0.0003	-.53
009	3.67	.93	300	47.09	-.11	368	1.10	-.56	368	0.25	-1.21	255	0.0004 R	-.59
390	3.50	.84	460	46.95	-.18	102	1.06	-.56	450	0.00	-1.32	086	0.0002	-.66
Avg	1.91		275	45.66 X	-1.10	393	0.00 X	-.58	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
450	0.20	-.90	368	45.39	-1.27	<u>Meth: 191.30 PPM Chromium ICP</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
393	0.11	-.95	389	33.35 S	-9.71	009	109.50	1.80	296	5.15	.97	230	0.0006 R	-.67
102	0.02	-1.00	<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
368	0.01	-1.00	397	49.35	1.51	419	98.00	1.55	368	0.25	-1.21	368	0.0000	-.85
<u>Meth: 181.30 PPM Cadmium ICP</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
035	4.47 R	1.35	419	48.85	1.16	035	41.70 R	.33	450	0.00	-1.32	157	0.0000	-.85
419	4.05	1.13	Avg	47.20		Avg	26.82		<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
296	3.75	.97	137	47.12	-.06	450	2.00	-.54	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
009	3.67	.93	300	47.09	-.11	086	1.67	-.55	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
390	3.50	.84	460	46.95	-.18	230	1.21	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
Avg	1.91		275	45.66 X	-1.10	368	1.10	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
450	0.20	-.90	368	45.39	-1.27	102	1.06	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
393	0.11	-.95	389	33.35 S	-9.71	393	0.00 X	-.58	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
102	0.02	-1.00	<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
368	0.01	-1.00	397	49.35	1.51	419	98.00	1.55	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
<u>Meth: 181.30 PPM Cadmium ICP</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
035	4.47 R	1.35	419	48.85	1.16	035	41.70 R	.33	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
419	4.05	1.13	Avg	47.20		Avg	26.82		<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
296	3.75	.97	137	47.12	-.06	450	2.00	-.54	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
009	3.67	.93	300	47.09	-.11	086	1.67	-.55	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
390	3.50	.84	460	46.95	-.18	230	1.21	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
Avg	1.91		275	45.66 X	-1.10	368	1.10	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
450	0.20	-.90	368	45.39	-1.27	102	1.06	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
393	0.11	-.95	389	33.35 S	-9.71	393	0.00 X	-.58	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
102	0.02	-1.00	<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
368	0.01	-1.00	397	49.35	1.51	419	98.00	1.55	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
<u>Meth: 181.30 PPM Cadmium ICP</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
035	4.47 R	1.35	419	48.85	1.16	035	41.70 R	.33	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
419	4.05	1.13	Avg	47.20		Avg	26.82		<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
296	3.75	.97	137	47.12	-.06	450	2.00	-.54	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
009	3.67	.93	300	47.09	-.11	086	1.67	-.55	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
390	3.50	.84	460	46.95	-.18	230	1.21	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
Avg	1.91		275	45.66 X	-1.10	368	1.10	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
450	0.20	-.90	368	45.39	-1.27	102	1.06	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
393	0.11	-.95	389	33.35 S	-9.71	393	0.00 X	-.58	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
102	0.02	-1.00	<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
368	0.01	-1.00	397	49.35	1.51	419	98.00	1.55	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
<u>Meth: 181.30 PPM Cadmium ICP</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 190.99 PCT Water Soluble Chloride Other</u>			<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
035	4.47 R	1.35	419	48.85	1.16	035	41.70 R	.33	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
419	4.05	1.13	Avg	47.20		Avg	26.82		<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
296	3.75	.97	137	47.12	-.06	450	2.00	-.54	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
009	3.67	.93	300	47.09	-.11	086	1.67	-.55	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper ICP</u>		
390	3.50	.84	460	46.95	-.18	230	1.21	-.56	<u>Meth: 202.30 PPM Acid Soluble Cobalt ICP</u>			<u>Meth: 221.30 PCT Acid Soluble Copper I</u>		

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 221.99 PCT Acid Soluble Copper			Meth: 241.30 PCT Acid Soluble Iron			Meth: 251.30 PPM Lead			Meth: 261.30 PCT Acid Soluble Manganese			Meth: 289.30 PPM Molybdenum		
<u>Other</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>ICP</u>		
231	0.0001	.00	232	0.02	-.99	444	0.50	-.56	035	0.001	-1.08	Avg	5.07	
422	0.1950 S	.00				393	0.29	-.64				393	1.39	-.82
Avg	0.0001		Meth: 241.99 PCT Acid Soluble Iron			102	0.13	-.70	Meth: 261.99 PCT Acid Soluble Manganese			433	0.27	-1.07
Meth: 221.XX PCT <u>Acid Soluble Copper</u>			<u>Other</u>			Meth: 251.XX PPM <u>Lead</u>			<u>Other</u>			368	0.02	-1.12
450	1.0000 s	1277.35	422	1.36	.71	136	15.00 s	5.29	422	0.026	-.71	450	0.00	-1.13
422	0.1950 s	248.52	Meth: 241.XX PCT <u>Acid Soluble Iron</u>			419	7.90	2.42	Meth: 261.XX PCT <u>Acid Soluble Manganese</u>			Meth: 289.99 PPM Molybdenum		
095	0.0020	1.76	354	1.50	.93	035	5.61 R	1.52	354	0.030	1.14	<u>Other</u>		
354	0.0020	1.76	105	1.46	.87	296	3.95	.83	009	0.026	.83	422	0.03	.00
230	0.0006 R	.69	131	1.40	.79	390	2.05	.07	390	0.026	.83	Meth: 289.XX PPM Molybdenum		
Avg	0.0006		009	1.38	.76	Avg	1.88		131	0.026	.77	255	12.03 R	1.94
419	0.0006	-.07	422	1.36	.72	450	1.00	-.35	422	0.026	.77	035	10.90	1.40
433	0.0005	-.14	390	1.34	.70	230	0.57	-.53	419	0.025	.72	419	9.25	1.03
393	0.0003	-.46	Avg	0.86		368	0.50	-.55	Avg	0.016		296	9.15	1.02
255	0.0004 R	-.56	086	0.05	-1.18	444	0.50	-.56	105	0.015	-.14	390	8.92	.96
086	0.0002	-.60	035	0.05	-1.18	393	0.29	-.64	232	0.006 R	-.93	009	5.75	.28
231	0.0001	-.67	102	0.04	-1.19	102	0.13	-.70	247	0.001	-1.23	Avg	4.57	
157	0.0000	-.80	232	0.02	-1.21	Meth: 261.00 PCT Acid Soluble Manganese			086	0.001	-1.23	393	1.39	-.70
368	0.0000	-.80	Meth: 251.00 PPM Lead			<u>AA</u>			102	0.001	-1.24	433	0.27	-.95
Meth: 241.00 PCT Acid Soluble Iron			Meth: 251.00 PPM Lead			105 0.015 .71			Meth: 281.30 PPM Mercury			422	0.03	-1.00
<u>Atomic Absorption</u>			<u>Atomic Absorption</u>			Meth: 261.30 PCT Acid Soluble Manganese			<u>ICP</u>			368	0.02	-1.00
105	1.46	.71	136	15.00 S	.00	<u>ICP</u>			393 2.89 -.71			450	0.00	-1.01
Meth: 241.30 PCT Acid Soluble Iron			Meth: 251.30 PPM Lead			354 0.030 1.13			Meth: 289.30 PPM Molybdenum			Meth: 291.30 PPM Nickel		
<u>ICP</u>			<u>ICP</u>			009 0.026 .84			<u>ICP</u>			<u>ICP</u>		
354	1.50	1.10	419	7.90	2.42	390 0.026 .83			255 12.03 R 1.86			009 17.30 1.64		
131	1.40	.96	035	5.61 R	1.52	131 0.026 .79			035 10.90 1.30			419 17.00 1.60		
009	1.38	.93	296	3.95	.83	419 0.025 .74			419 9.25 .93			296 16.20 R 1.49		
390	1.34	.88	390	2.05	.07	Avg 0.015			296 9.15 .91			035 6.35 .12		
Avg	0.72		Avg	1.88		232 0.006 R -.81			009 5.75 .18			Avg 5.50		
086	0.05	-.96	450	1.00	-.35	247 0.001 -1.07			450 1.00			-.62		
035	0.05	-.96	230	0.57	-.53	086 0.001 -1.08			230 0.89			-.64		
102	0.04	-.96	368	0.50	-.55	102 0.001 -1.08			102 0.54			-.69		

\* X=Excluded from lab performance    S/s=Screened Outlier    R=Duplicate Range too large    A=Analysis beyond 3-s limits

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
Meth: 291.30 PPM Nickel			Meth: 301.XX PPM Selenium			Meth: 321.30 PCT Acid Soluble Zinc			Meth: 325.99 PCT Water Soluble Zinc					
<u>ICP</u>			<u>ICP</u>			<u>ICP</u>			<u>Other</u>					
393	0.49	-.69	231	1.82	1.49	102	0.000	-.80	157	0.000	.00			
368	0.40	-.71	Avg	0.72		157	0.000	-.83						
Meth: 291.99 PPM Nickel			393 0.65 -.09			Meth: 321.99 PCT Acid Soluble Zinc			Meth: 325.XX PCT Water Soluble Zinc					
<u>Other</u>			368 0.40 -.59			<u>Other</u>			157 0.000 .00					
231	0.60	.71	450	0.00	-.97	422	0.010	.87	393	0.000 X	.00			
Meth: 291.XX PPM Nickel			Meth: 311.99 PCT Sodium			Avg 0.006			Avg 0.000					
<u>Nickel</u>			<u>Other</u>			231 0.001 -.87								
009	17.30	1.70	086	1.27	.91	Meth: 321.XX PCT Acid Soluble Zinc								
419	17.00	1.66	102	1.25	.88	<u>Atomic Absorption</u>								
296	16.20 R	1.55	232	1.20 R	.78	296	0.005	.88						
035	6.35 R	.22	035	1.05	.50	Avg	0.004							
Avg	4.78		Avg	0.78		422	0.20	-1.11						
450	1.00	-.51	422	0.20	-1.11	009	0.16	-1.19						
230	0.89	-.53	009	0.16	-1.19	Meth: 321.00 PCT Acid Soluble Zinc								
231	0.60	-.57	Meth: 321.00 PCT Acid Soluble Zinc			<u>Atomic Absorption</u>								
102	0.54	-.57	296 0.005 .88			296 0.005 .88								
393	0.49	-.58	Avg 0.004			Avg 0.004								
368	0.40	-.59	105 0.004 -.85			105 0.004 -.85								
Meth: 301.30 PPM Selenium			Meth: 321.30 PCT Acid Soluble Zinc			255 0.003 R -.21								
<u>ICP</u>			<u>ICP</u>			231 0.001 -.67								
368	0.40	.87	450 1.000 s 304.90			086 0.000 -.86								
393	0.65	.86	095 0.009 2.04			232 0.000 -.93								
Avg	0.35		354 0.006 1.01			230 0.000 -.94								
450	0.00	-1.00	419 0.005 R .66			102 0.000 -.97								
Meth: 301.99 PPM Selenium			009 0.004 .53			157 0.000 -1.00								
<u>Other</u>			433 0.004 .28			Meth: 325.30 PCT Water Soluble Zinc								
231	1.82	.71	255 0.003 R .25			<u>ICP</u>								
			Avg 0.003			393 0.000 X .00								
			086 0.000 -.69											
			232 0.000 -.76											
			230 0.000 -.77											

\* X=Excluded from lab performance    S/s=Screened Outlier    R=Duplicate Range too large    A=Analysis beyond 3-s limits

## Method Evaluation - Z Values Based on 1 Reports

Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs	Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs
001.10	8	- 2.34	6.68	0.10	060.00	4	0.00	1.05	0.22
001.99	13	- 0.31	1.56	0.32	060.XX	5	0.00	1.06	0.05
001.XX	21	- 0.98	4.36	0.29	101.30	10	9.65	30.53	0.18
002.99	2	0.00	1.17	0.26	101.XX	11	9.87	33.48	0.20
002.XX	2	0.00	1.17	0.26	121.30	11	0.03	0.98	0.02
009.10	2	0.00	1.21	0.14	121.XX	13	0.02	0.98	0.02
009.XX	3	0.00	1.11	0.12	144.01	8	0.28	1.23	1.69
010.11	9	- 0.65	2.17	0.15	144.99	19	1.02	8.04	0.41
010.12	3	0.00	0.70	0.71	144.XX	27	1.40	7.31	3.46
010.60	51	0.03	1.78	0.31	151.30	7	0.22	1.12	0.06
010.99	5	0.00	1.05	0.15	151.XX	9	0.21	1.15	0.06
010.XX	68	0.07	1.34	0.22	165.99	4	0.425	1.248	0.015
020.10	8	0.49	1.64	0.39	165.XX	4	0.425	1.248	0.015
020.20	14	- 0.34	1.59	0.37	181.30	9	0.15	1.07	0.03
020.40	7	0.00	1.01	0.22	181.XX	10	0.15	1.08	0.03
020.50	10	- 0.20	1.12	0.56	190.00	9	- 0.14	1.04	0.25
020.99	3	0.00	1.12	0.02	190.99	9	- 4.71	11.00	0.09
020.XX	41	- 0.18	1.21	0.39	190.XX	18	- 2.96	9.79	0.16
030.40	2	0.00	1.22	0.04	191.30	9	0.04	0.97	0.02
030.XX	5	0.21	1.05	0.06	191.XX	10	0.38	1.30	0.03
040.40	2	0.00	1.14	0.32	202.30	8	0.00	1.03	0.07
040.XX	5	0.00	0.98	0.37	202.99	3	0.00	1.12	0.00
041.10	14	- 0.04	0.98	0.19	202.XX	12	0.59	1.76	0.07
041.20	2	0.00	1.18	0.24	221.30	11	112.41	372.99	0.2427
041.40	4	0.00	0.83	0.60	221.99	2	0.0000	0.0000	0.0000
041.50	12	- 0.57	2.36	0.51	221.XX	13	117.34	355.23	1.7874
041.60	8	- 2.75	7.09	1.05	241.30	8	0.00	1.03	0.03
041.XX	35	- 0.60	2.70	0.59	241.XX	10	0.00	1.03	0.03
048.20	3	0.00	1.11	0.10	251.30	10	0.15	1.08	0.08
048.XX	4	0.00	1.08	0.06	251.XX	11	0.62	1.86	0.14
050.00	10	- 0.65	2.27	0.06	261.30	10	- 0.071	0.997	0.122
050.10	2	0.00	1.19	0.19	261.XX	12	- 0.070	1.006	0.121
050.30	9	- 0.63	2.27	0.25	289.30	10	0.15	1.09	0.33
050.50	9	- 0.72	2.36	0.24	289.XX	11	0.15	1.09	0.31
050.51	8	- 0.03	0.96	0.13	291.30	9	0.17	1.09	0.02
050.60	4	- 0.48	1.32	0.20	291.XX	10	0.18	1.03	0.02
050.61	8	- 10.70	36.94	0.55	301.30	3	0.00	0.94	0.50
050.99	22	- 0.80	2.10	0.64	301.XX	4	0.00	1.05	0.21
050.XX	68	- 1.15	6.27	0.44	311.99	6	0.13	1.00	0.03

## Method Evaluation - Z Values Based on 1 Reports

Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs	Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs
311.XX	6	0.13	1.00	0.03					
321.00	2	0.000	1.199	0.175					
321.30	12	25.471	88.001	0.097					
321.99	2	0.000	1.225	0.000					
321.XX	16	18.190	72.683	0.081					